

138505

MEMORANDUM

State Water Control Board

2111 North Hamilton Street

P. O. Box 11143

Richmond, VA. 23230

SUBJECT: Greenwood Chemical Company - Albemarle County

TO: See Below*

FROM: James A. Preston *James A. Preston*

DATE: 29 January 1976

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*L. G. Lawson, Director, Bureau of Applied Technology
Michael A. Bellanca, Director, Bureau Surveillance and Field Studies
A. H. Paessler, Executive Secretary - Operations
R. E. Bowles, Director, Bureau of Enforcement

Attached are several memoranda, location map, and brochure concerning the Greenwood Chemical Company, located in Albemarle County near I-64 near the bottom of Afton Mountain. It is reached from Route 250 by way of State Route 796 and Route 690 as shown on the attached Waynesboro East quad section.

The study of the South Fork Rivanna River Reservoir currently being conducted by Betz Environmental Engineering, indicated that a discharge was coming from this location and subsequently brought to our attention verbally by Mr. George Williams of the Rivanna Water and Sewer Authority. We have since visited the plant on three occasions, obtaining various waste samples on two occasions for submission to D.C.L.S.

Greenwood Chemical Company manufactures various organic chemicals in small quantities by batch process. The present owner, Mr. Clint Shipman, operates the facility apparently with a rather small work force. According to Mr. Shipman's statement, there has been little or no operation at the plant essentially for the past 2 - 3 months. He considers his processes to be trade secrets. Mr. Shipman has been cooperative with the staff, although an illness and burn injury kept him from being personally available during our last visit. Our second visit was terminated early when he became sick.

Waste from processing is largely contained in a series of small ponds of varying sizes. There should not be any discharge, although it has been occurring. Mr. Shipman has indicated that during ordinary production times flow rates may be on the order of 1,000 to 1,500 gallons per day.

Discharge, when occurring, is to an intermittent tributary to Stockton Creek. It is approximately 8 stream miles of intermittent tributary and Stockton Creek to confluence with Mechums River. It is approximately 12½ miles of Mechums River to the confluence with South Fork Rivanna River, not far above the backwater of the South Rivanna Reservoir. The South Rivanna Reservoir is of course, the principal water supply source for the City of Charlottesville and portions of Albemarle County.

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The attached memoranda by this office cover various details of our visits and the conditions found at the plant site and waste holding ponds.

It is the opinion of this office that a no discharge situation should be imposed and maintained at this facility. To do this we believe considerable upgrading of the existing ponds and probable added improvements will be required in order to guarantee "no discharge".

However, there may well be plant conditions and/or potentials for problems that would be of interest to other regulatory agencies of the State, such as the State Department of Health, Bureau of Industrial Hygiene, Bureau of Solid Waste and Vector Control, Bureau of Sanitary Engineering, and possibly others. Please make distribution as appropriate.

Included in the attachments is a list of raw materials and products at Greenwood Chemical Company. Generally the products are somewhat unusual organic materials, both solids and liquid forms, for which we do not have information concerning toxicity or whether or not they would be classified as hazardous chemicals environmentally or personnel wise in an industrial operation.

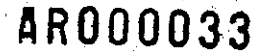
It is requested that assistance by the appropriate Bureau be given in obtaining appropriate information concerning these materials and possible wastes or intermediate products, as well as recommendations for waste sampling and characterization purposes. We believe we must be better informed as to the contents of the waste ponds in order to properly establish requirements for a no discharge certificate.

Please call me or Tom Mizell on any questions that you may have about these requests or other aspects of this case. We will keep you informed of our progress.

We think that it would be a big help if we could secure an aerial photograph of this facility, and have learned such is available from the Department of Highways. A picture of the area at a scale of 1 inch = 100 feet can be obtained at a cost of \$15.50. Mr. F. B. Bales or Mrs. Dodson of the Photogrammetric Aerial Survey Section, 1401 East Broad Street, 9th Floor, Highway Department Annex Building, have previously been contacted about this. If you should decide and secure such a photograph we urgently request a copy.

JAP:jf

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Raw Materials

Paranitro chlorobenzene
Benzyl cyanide
Sodium hypo phosphite
Copper Sulfate

Naphthalene
Para formaldehyde

Beta-naphthol
Sodium cyanide
Benzal aldehyde
Diethylaminonitrile

Monochloro Acetic Acid
Acetic Acid
Sodium

Sulfuric Acid
Muriatic Acid
Sodium Hydroxide
Toluene
Methanoyl
Acetone
Isopropyl Alcohol

Products

2 - Amino - 5 - chlorobenzophenone
4 - Aminopyridine
Benzil
Benzilic Acid
(Diphenylglycollic Acid)

Diethylaminoethylamine
(N.N - Diethylethylene - diamine)

d1 - Benzoin
(Benzoylphenylcarbinol)

Ferulic Acid
(4 - Hydroxy - 3 -methoxycinnamic acid)

Isonicotinamide

Isonicotinic Acid

a- Naphthalene Acetamide

1 - Naphthalene Acetic Acid

a- Naphthalene Acetic-Acid
(Sodium Salt)

a- Naphthylacetonitrile

1 - Naphthoic Acid

1-10 Phenanthroline Monohydrate

Picolinic Acid

Valoronitrile
(n - butyl cyanide)

(Valeriansaurenitril)

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